

# LED HID High Bay Retrofit Series



The ProLED® HID High Bay Retrofit Series lamps are an easy to install LED replacement for 400W Metal Halide lamps. Designed specifically for high bay luminaires, and offering up to 130 LPW efficacy, the directional design offers the most effective way to deliver an equal amount of light to the work plane when compared to omnidirectional metal halide sources. The unique passive cooling design, louvered heat sink to minimize dust intrusion, and 50,000 hour useful life, combined with the ability to eliminate the ballast ensure that luminaire maintenance is a thing of the past.

## Performance Specifications

<b>CRI</b> _____	82	<b>Min. Start Temp.</b> _____	-4°F(-20°C)
<b>Rated Life</b> _____	50,000 hour life	<b>Max. Operating Temp.</b> _____	140°F(60°C)
<b>Watt</b> _____	115	<b>Power Factor</b> _____	0.99
<b>Lumens</b> _____	14375 (84000), 14950 (84001)	<b>Warranty</b> _____	5-Year Limited
<b>Lumens per Watt (LPW)</b> _____	125 (84000), 130 (84001)	<b>Control</b> _____	Non-Dimmable
<b>Input Line Voltage</b> _____	120-277V	<b>Weight</b> _____	4.8 lbs.

\* On standard (0.88 BF) ballast

## Energy Savings

Lamp	System Wattage	Replacement LED	System Wattage	Energy Savings
400W Metal Halide	458W	HID115/840/MV/EX39/LED	115W	74%

## Construction

- Replaces 400W Metal Halide lamps
- Includes safety cable for additional security
- EX39 base – can be used in both open and enclosed rated sockets
- Passive cooling heat sink (no internal fan)
- Unique louvered heat sink shield avoids dust accumulation and heat buildup
- Isolated driver enclosure helps maintain optimal thermal performance

## Installation

- Requires simple ballast bypass/removal to operate directly on line voltage
- UL Classified 1598C Retrofit Kit for high bay luminaires (maintains system UL compliance after luminaire modification)
- UL Listed for damp locations
- Rated for Use in ambient temperatures up to 60°C (140°F)
- Directional design offers superior delivered light when compared to omnidirectional options

## Electrical

- 120V-277V input range
- Non-Dimmable
- Integral 4KV surge protection
- 50/60 Hz operating frequency
- High power factor for optimal energy efficiency
- Superior efficacy - up to 130 lumens per watt

## Ordering Information

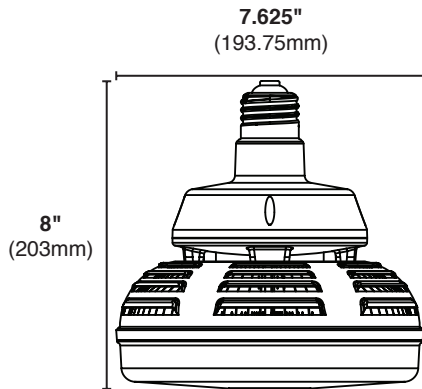
Watt	Base	Product #	Product Code	Color Temp.	CRI	Lumen Output	Useful Life*	Pkg. Qty.	Beam Spread	DLC® Qualified	Equivalent Wattage
115 Watt	EX39	84100	HID115/840/MV2/EX39/LED	4000K	82	14,375	50,000	1/8	Directional	Yes	400W
115 Watt	EX39	84101	HID115/850/MV2/EX39/LED	5000K	82	14,950	50,000	1/8	Directional	Yes	400W

\* Useful Life is defined as the point in time at which the lamp will maintain at least 70% of its initial lumens. The lamp will continue to operate past this point at decreased light levels.

† Linear Direct T8 series lamps operate on compatible instant start electronic ballasts regardless of input voltage.



## Photometrics



115W

### ILLUMINANCE AT A DISTANCE

HEIGHT(FT)	CENTER BEAM		BEAM SPREAD(FT)	
	FOOTCANDLE	HORIZONTAL	VERTICAL	
4.00	268.94 FC	13.6	13.1	
8.00	67.23 FC	27.3	26.2	
12.00	29.88 FC	40.9	39.4	
16.00	16.81 FC	54.5	52.5	
20.00	10.76 FC	68.2	65.6	
BEAM ANGLE				
		119.2°	117.3°	

### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%

RCC %:	80				70				50				30				10				0			
RW %:	70	50	30	0	70	50	30	0	50	30	20	0	50	30	20	0	50	30	20	0	50	30	20	0
RCR: 0	1.17	1.17	1.17	1.17	1.13	1.13	1.13	.91	1.06	1.06	1.06	1.00	1.00	1.00	1.00	1.00	.94	.94	.94	.91				
1	1.06	1.01	.97	.93	1.03	.98	.94	.76	.92	.89	.86	.87	.84	.82	.82	.80	.82	.80	.78	.75				
2	.96	.88	.81	.75	.93	.85	.79	.63	.80	.75	.70	.76	.71	.68	.71	.68	.65	.62	.62	.62				
3	.88	.77	.69	.62	.84	.75	.67	.54	.70	.64	.59	.67	.61	.57	.63	.58	.55	.52	.52	.52				
4	.80	.68	.59	.52	.77	.66	.58	.46	.62	.55	.50	.59	.53	.48	.56	.51	.47	.44	.44	.44				
5	.73	.60	.51	.45	.71	.59	.50	.40	.56	.48	.43	.53	.47	.42	.50	.45	.40	.38	.38	.38				
6	.68	.54	.45	.39	.65	.53	.44	.35	.50	.43	.37	.48	.41	.36	.45	.40	.35	.33	.33	.33				
7	.63	.49	.40	.34	.60	.48	.40	.31	.46	.38	.33	.43	.37	.32	.41	.36	.31	.29	.29	.29				
8	.58	.45	.36	.30	.56	.44	.36	.28	.42	.34	.29	.40	.33	.29	.38	.32	.28	.26	.26	.26				
9	.54	.41	.33	.27	.52	.40	.32	.25	.38	.31	.26	.36	.30	.26	.35	.29	.25	.23	.23	.23				
10	.51	.38	.30	.24	.49	.37	.29	.22	.35	.28	.24	.34	.28	.23	.32	.27	.23	.21	.21	.21				

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LUMINAIRE
0-30	3,456.3	23.3%
0-40	5,755.7	38.7%
0-60	10,440.9	70.3%
60-90	3,120.5	21%
70-100	1,702.6	11.5%
90-120	842.7	5.7%
0-90	13,561.4	91.3%
90-180	1,294.3	8.7%
0-180	14,855.7	100%

## Beam Spread

